IN THE CLAIM

1   1. (Currently Amended) A method for augmenting a debugger having debugging

2   functionality used to debug a first program, comprising the steps of:

3   providing the debugger;

4   providing a second program having second-program functionality; and

5   providing integration code for

6   ~~analyzing commands used to debug the first program, and~~

7   invoking ~~appropriate pieces~~ a piece of code to perform a task[s] in

8   response ~~responding~~ to ~~such~~ a debugging command[s;]¸

9   based on types of a breakpoint;

10   wherein if the breakpoint is a debugging breakpoint, then the piece of code

11   is selected from the debugging functionality, else if the breakpoint

12   is an instrumentation breakpoint, then the piece of code is selected

13   from the second-program functionality.

14   ~~wherein the appropriate pieces of code are selected from one or a~~

15   ~~combination of~~

16   ~~functionality provided in a library,~~

17   ~~the debugging functionality, and~~

18   ~~the second-program functionality.~~

1   2. (Original) The method of claim 1 further comprises the step of using an instrumentor as

2   the second program.

1   3. (Canceled) The method of claim 1 further comprises the step of using a first piece of

2   code having the appropriate pieces of code to perform the tasks.

1   4. (Currently Amended) The method of claim [3] 1 further comprises the step of making

2   the first piece of code an executable part of the first program.

1   5. (Currently Amended) The method of claim [3] 1 further comprises the step of using a

2   trampoline as the first piece of code.

1   6. (Currently Amended) The method of claim 1 wherein the commands are debugging

2   command is selected from one or a combination of:

3   input from a user using the debugger;

4   a script file associated with the first program; and

5   a configuration file associated with the first program.

1   7. (Currently Amended) The method of claim 1 further comprises the step of inputting the

2   debugging command[s] at a debugging prompt provided by the debugger.

1   8. (Currently Amended) The method of claim 1 further comprises the steps of:

2   integrating the debugger, the instrumentor second program, and the

3   integration code into a combined code; and

4   embedding the combined code into a language environment.

1   9. (Currently Amended) The method of claim 8 further comprises the step of using the an

2   Integrated Development Environment as the language environment.

1   10. (Currently Amended) A system for augmenting a debugger having debugging

2   functionality used to debug a first program, comprising:

3   the debugger;

4   a second program having second-program functionality; and

5   integration code for

6   ~~analyzing commands used to debug the first program, and~~

7   invoking ~~appropriate pieces~~ a piece of code to perform a task[s] in

8   ~~responding~~ response to ~~such~~ a debugging command[s;]__,__

9   based on types of a breakpoint;

10   wherein if the breakpoint is a debugging breakpoint, then the piece of code

11   is selected from the debugging functionality, else if the breakpoint

12   is an instrumentation breakpoint, then the piece of code is selected

13   from the second-program functionality.

14   ~~wherein the appropriate pieces of code are selected from one or a~~

15   ~~combination of~~

16   ~~functionality provided in a library,~~

17   ~~the debugging functionality, and~~

18   ~~the second-program functionality.~~

1   11. (Original) The system of claim 10 further comprises an instrumentor used as the

2   second program.

1   12. (Canceled) The system of claim 10 further comprises a first piece of code having the

2   appropriate pieces of code to perform the tasks.

1   13. (Currently Amended) The system of claim [12] 10 wherein the ~~first~~ piece of code is an

2   executable part of the first program.

1   14. (Currently Amended) The system of claim [12] 10 wherein a trampoline is used as the

2   first piece of code.

1   15. (Currently Amended) The system of claim 10 wherein the ~~commands are~~ debugging

2   command is selected from one or a combination of:

3   input from a user using the debugger;

4   a script file associated with the first program; and

5   a configuration file associated with the first program.

1   16. (Currently Amended) The system of claim 10 wherein the debugging command[s] ~~are~~

2   is inputted at a debugging prompt provided by the debugger.

1   17. (Currently Amended) The system of claim 10 wherein:

2   the debugger, the ~~instrumentor~~ second program, and the integration code

3   are integrated into a combined code; and

4   the combined code is embedded in a language environment.

1   18. (Currently Amended) The system of claim 17 wherein ~~the~~ an Integrated Development

2   Environment is used as the language environment.

1   19. (Currently Amended) A computer-readable medium embodying instructions that

2   cause a computer to perform a method for augmenting a debugger having

3   debugging functionality used to debug a first program, the method comprising the

4   steps of:

5   providing the debugger;

6   providing a second program having second-program functionality; and

7   providing integration code for

8   ~~analyzing commands used to debug the first program, and~~

9   invoking ~~appropriate pieces~~ a piece of code to perform a task[s] in

10   ~~responding~~ response to ~~such commands;~~ a debugging

11   command, based on types of a breakpoint;

12   wherein if the breakpoint is a debugging breakpoint, then the piece of code

13   is selected from the debugging functionality, else if the breakpoint

14   is an instrumentation breakpoint, then the piece of code is selected

15   from the second-program functionality.

16   ~~wherein the appropriate pieces of code are selected from one or a~~

17   ~~combination of~~

18   ~~functionality provided in a library,~~

19   ~~the debugging functionality, and~~

20   ~~the second-program functionality.~~

1   20. (Original) The computer-readable medium of claim 19 wherein the method further

2   comprises the step of using an instrumentor as the second program.

1   21. (New) The method of claim 1 wherein the piece of code is stored in a library.

1   22. (New) The method of claim 1 wherein the integration code generates the piece of

2   code.

1   23. (New) The method of claim 1 wherein the integration code keeps track of

2   modifications to the first program, and, if appropriate, undoes the modifications.

1   24. (New) The method of claim 1 wherein in a loop of more than one time, execution of

2   code in the loop is transferred to the debugger one time.

1   25. (New) The system of claim 10 wherein the piece of code is stored in a library.

1   26. (New) The system of claim 10 wherein the integration code generates the piece of

2   code.

1   27. (New) The system of claim 10 wherein the integration code keeps track of

2   modifications to the first program, and, if appropriate, undoes the modifications.

1   28. (New) The system of claim 10 wherein in a loop of more than one time, execution of

2   code in the loop is transferred to the debugger one time.